

What is claimed is:

Sub B1
1. A fuel container formed by bonding upper and lower sections, for which both the upper and lower sections are made by thermo-forming a multi-layer sheet that comprises an interlayer of a barrier resin (A) and inner and outer layers of a polyolefin (B), and of which the surface of the innermost layer is coated with a layer of a barrier material (C).

2. The fuel container as claimed in claim 1, wherein the barrier resin (A) is at least one selected from polyvinyl alcohol resins, polyamides and aliphatic polyketones.

3. The fuel container as claimed in claim 1, wherein the barrier resin (A) is an ethylene-vinyl alcohol copolymer having an ethylene content of from 5 to 60 mol% and a degree of saponification of at least 85 %.

4. The method of producing a shaped article as claimed in claim 1, the barrier resin (A) is a resin composition comprising from 50 to 95 % by weight of an ethylene-vinyl alcohol copolymer and from 5 to 50 % by weight of a boronic acid-modified polyolefin.

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5. The fuel container as claimed in claim 1, wherein the gasoline permeation through the barrier resin (A) is at most 100 g·20 $\mu\text{m}^2\cdot\text{day}$, measured at 40°C and 65 % RH.

6. The fuel container as claimed in claim 1, wherein the polyolefin (B) is high-density polyethylene.

7. The fuel container as claimed in claim 1, wherein

the gasoline permeation through the barrier material (C) is at most 400 g·20 $\mu\text{m}/\text{m}^2\cdot\text{day}$, measured at 40°C and 65 % RH.

8. The fuel container as claimed in claim 1, wherein the barrier material (C) is at least one selected from the group consisting of polyvinyl alcohol resins, polyamide resins, aliphatic polyketones, polyester resins, polyvinyl chloride resins and polyvinylidene chloride resins.

9. The fuel container as claimed in claim 1, wherein the barrier material (C) is an ethylene-vinyl alcohol copolymer having an ethylene content of from 5 to 60 mol% and a degree of saponification of at least 85 %.

10. The fuel container as claimed in claim 1, wherein the surface of the inner layer of the multi-layer sheet that constitutes the thermo-formed upper and lower sections is sprayed with a powder of the barrier material (C).

11. The fuel container as claimed in claim 10, wherein the surface of the inner layer of the multi-layer sheet that constitutes the thermo-formed upper and lower sections is sprayed with a powder of the barrier material (C) according to a flame spray coating process.

12. The fuel container as claimed in claim 10, wherein a powder of the barrier material (C) is sprayed over the surface of the inner layer of the multi-layer sheet that constitutes the thermo-formed upper and lower sections, at least around the bonded part of the sections, according to a flame spray coating

process.

13. The fuel container as claimed in claim 10, wherein a powder of the barrier material (C) is sprayed over the surface of the inner layer of the multi-layer sheet, and the thickness of the coat layer of the barrier material (C) falls between 1 and 500 μm .

14. The fuel container as claimed in claim 1, wherein the surface of the inner layer of the multi-layer sheet that constitutes the thermo-formed upper and lower sections is coated with the barrier material (C) according to a solution coating or emulsion coating process.

15. The fuel container as claimed in claim 14, wherein the surface of the inner layer of the multi-layer sheet is coated with the barrier material (C) according to a solution coating or emulsion coating process, and the thickness of the coat layer of the barrier material (C) falls between 0.1 and 50 μm .

16. A method for producing a fuel container, which includes thermo-forming a multi-layer sheet that comprises an interlayer of a barrier resin (A) and inner and outer layers of a polyolefin (B) into two thermo-formed multi-layer sections, then coating the inner surface of each section with a layer of a barrier material (C), and thereafter heat-sealing the open-end edges of the two sections to complete a fuel container.

17. A method for producing a fuel container, which includes thermo-forming a multi-layer sheet that comprises an

interlayer of a barrier resin (A) and inner and outer layers of a polyolefin (B) into two thermo-formed multi-layer sections, then coating the inner surface of each section except the area of open-end edge thereof with a layer of a barrier material (C), and thereafter heat-sealing the open-end edges of the two sections to complete a fuel container.